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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,174

08/11/2006

Philippe Gilberton

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04/27/2009

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EXAMINER

PATHAK, SUDHANSHU C

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,174	Applicant(s) GILBERTON ET AL.	
	Examiner SUDHANSHU C. PATHAK	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-15 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 11-15 (apparatus) & 5-10 (method) are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirvilampi (6,351,189).

In regards to Claims 1, 4, 5, 7, 9, 11 & 15, Hirvilampi discloses an apparatus (method) (Fig. 3) comprising modulating means for performing multi-carrier modulations (Fig. 3, element 302 & Column 4, lines 30-40) the apparatus further comprising: processing means for retrieving a digital value corresponding to type of modulation associated with a transmission signal (Fig. 3, elements 302, 208, 322 & Column 4, lines 35-40); amplifying means for amplifying the transmission signal, controlled by the analog signal decreasing bias current when decreasing the efficiency per bit of the digital modulation and vice versa (Fig. 3, elements 310 & Column 2, lines 25-48 & Column 5, lines 5-25 & Column 5, line 65-to-Column 6, line 20). Hirvilampi further discloses said transmitter apparatus is part of a mobile transceiver (Column 1, lines 10-15) having a power supply (Fig. 3, elements 330, 316). Hirvilampi further discloses varying bias based on amplifier electrical

characteristics (Abstract, lines 5-10). However, Hirvilampi does not explicitly disclose converting means converting said digital value to an analog signal and said mobile transceiver having a battery power supply. However, it would have been obvious to one of ordinary skill in the art at the time of the invention that a digital-to-analog is implemented so as to convert the modulation information from the baseband processor (digital) to the bias circuit (analog). Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention that a mobile transceiver includes a battery power supply. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention that there is no criticality in selecting the crest factor as a digital value this is a matter of design choice since the crest factor is related to a specific type of modulation. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention that there is no criticality in implementing the apparatus in compliance with one of the standards including 802.11a/802.16a/DVB-T this is a matter of design choice depending on the communication system (network) implemented.

In regards to Claims 2, 6 & 12, Hirvilampi discloses an apparatus (method) as described above. Hirvilampi further discloses signal transmitting means for wirelessly transmitting said transmission signal (Fig. 3, element "To Antenna"). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Hirvilampi satisfies the limitation of the claim.

In regards to Claims 3, 8, 10 & 13-14, Hirvilampi discloses an apparatus as described above. Hirvilampi further discloses said type of modulation includes one

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of: bi-phase shift keyed (BPSK) modulation; quadrature phase shift keyed (QPSK) modulation; and quadrature amplitude modulation (QAM) (Column 4, lines 35-40 & Column 5, lines 6-25 & Column 6, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Hirvilampi satisfies the limitation of the claim. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention that there is no criticality in selecting 16-QAM or BPSK this is a matter of design choice depending on the data rate required.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUDHANSHU C. PATHAK whose telephone number is (571)272-5509. The examiner can normally be reached on 9am-5pm.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on 571-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhanshu C Pathak/
Primary Examiner, Art Unit 2611